TRIREX® 3027IR

Samyang Corporation - Polycarbonate

Tuesday, November 5, 2019

General Information

General			
Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	• North America
Features	• Good Mold Release	• Medium Viscosity	
Forms	• Pellets		
Processing Method	• Blow Molding	• Extrusion	• Injection Molding

ASTM & ISO Properties [1]

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.20		ASTM D792
Melt Mass-Flow Rate (300°C/1.2 kg)	4.5	g/10 min	ASTM D1238
Molding Shrinkage - Flow (0.118 in)	5.0E-3 to 7.0E-3	in/in	ASTM D955
Water Absorption (24 hr, 73°F)	0.15	%	ASTM D570
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Strength (Yield)	10200	psi	ASTM D638
Tensile Elongation (Break)	140	%	ASTM D638
Flexural Modulus	327000	psi	ASTM D790
Flexural Strength (Yield)	13000	psi	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact (0.125 in)	18	ft·lb/in	ASTM D256
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	271	°F	
CLTE - Flow	2.8E-5 to 3.9E-5	in/in/°F	ASTM D696
Electrical	**Nominal Value**	**Unit**	**Test Method**
Volume Resistivity	4.0E+16	ohms·cm	ASTM D257
Dielectric Strength	760	V/mil	ASTM D149
Arc Resistance	120	sec	ASTM D495
Flammability	**Nominal Value**	**Unit**	**Test Method**
Flame Rating (0.06 in)	V-2		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	248	°F
Drying Time	3.0 to 5.0	hr
Suggested Max Moisture	< 0.020	%
Rear Temperature	473 to 518	°F
Middle Temperature	500 to 545	°F
Front Temperature	527 to 572	°F
Nozzle Temperature	527 to 590	°F
Processing (Melt) Temp	527 to 590	°F
Back Pressure	36.3 to 102	psi
Screw Speed	40 to 70	rpm

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Injection	Nominal Value	Unit
Vent Depth	7.9E-4 to 0.031	in

Notes

[1] Typical properties: these are not to be construed as specifications.